

FIGURE 1

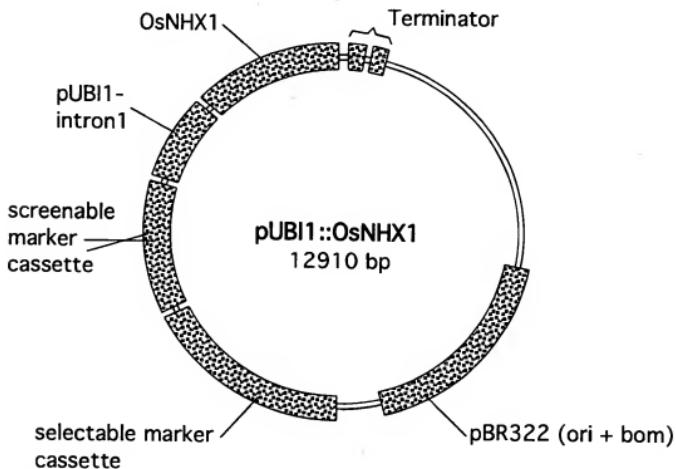


FIGURE 2

SEQ ID NO 1: coding sequence for *Oryza sativa* NHX1 protein

GAGAAGAGAGTTGTAGCGAGCTCGCGCAATGCGAACGCCAACCGAGAGAGGGTCTCGA
 TACCAAATCCCGATTCTCAACCTGAATCCCCCCCCACGTTCTCGTTCAATCTGTT
 CGTCTCGGAATCGAATTCTTGTCTTCTCTAATTTCACCGGGAAATTGTCGAATT
 AGGCATTCAACGAGCAAGGGGAGGTGGATTGGTTAAAGCTCCGCATCTTGC
 GCGCAGAATCTCGCTCTTCTCGCGTGGGTGGCGAGAACGTCGCCGCCGTGAGG
CATGGGATGGAGGTGGCGCGCGCGCGCTGGGGCTCTGTACACGACCTCGACTACG
 CGTCTGGTGTCCATCAACCTGTTCTCGCGCTGCTCTGCCTGCATCGTCTCGGC
 CACCTCTCGAGGAGAACGTCCTGGGTCAATGAGTCATCACCGCGCTCATCGGGCT
 CTGACCCGGCGGTGATCTGTGATGACCAAAAGGGAGAGCTCGCACTTATCGCT
 TCACTGAGGATCTCTCTCATCTACCTCTCCCTCGATCATCTCAATCAGGTTT
 CAGGAAAGAAAAGCAATTCTCCGAATTTCATGACGATCACATTATTGGAGCCGT
 CGGGACAATGATATCTTTTCAAAATATCTATTGCTGCCATTGCAATATTCAAGCAA
 TGAACATTGGAACCGTGGATGAGGATTTCTGCAATTGGAGCATCTTCTCGG
 ACAGATTCTGTGTCACATTGCAAGGCTCAATCAGGATGAGACACCCCTTGTACAG
 TCTGGTATTGGTGAAGGTGTTGATGACGATGCTACATCAATTGTGCTTCAACGAC
 TACAGAACTTGTCTTGTCCACATAGATGCGCTGTCGTTCTGAAATTCTGGGAAAC
 TTCTTTATTATTTGTGAGCACCTCCCTGGAGTATTGCTGGATTGCTCAGTGC
 ATACATAATCAAGAAGCTATACATTGGAAGGCTACTGACCGTGAGGTTGCCCTTA
 TGATGCTCATGGCTTACCTTCTATATGCTGGTGAGGTGCTAGATTGAGGGCATT
 CTACCGTATTCTCTGTGTTGATATGTCATATCACATTGCAATTGGCATAACGTCACAGA
 GAGTTCAAGAGTTACAACAAAGCACGATTGCAACTCTGCTCTTCAATTGCTGAGACTT
 TTCTCTCTGTATGTTGGGATGGATGATTGGATATTGAAAATGGAGTTGCCAGT
 GACAGACCTGCGAACATCCATTGGGATAAGCTAATTGCTTAGGATTGGTTCTGATTGG
 AAGAGCTGCTTTGATTCCTCGCTGCTGCTTCTGCAACCTAACAAAGAAGGCCGA
 ATGAAAATAACCTGGAGACAGCAAGTTGAAATTGTTGGCTGGGCTGATGAGAGGA
 GCTGTGTCGATTGCTCTGCTTACAATAAGTTACAAGATGGCCATCTCAGTCGA
 CGGAATGCAATAATGATCACAGCACCATCAGTCGTTCTTGTGACTATGGTAT
 TTGGGATGATGACAAGGCAATTGATCAGGCTGCTGCTACGGCCCTCAGGCCATCTGTC
 ACCTCTGAGCCCTCATACCAAAAGTCCCTGCATTCTCCTCTCCTGACAAGCTGCAAGG
 TTCTGACCTCGAGAGTACACCAACTTGTGAGGCCCTTCAAGCCTCCGGATGCTCTCA
 CCAAGCCGACCCACACTGTCACACTACTGGCGCAAGTTCAGCAGCCGCTGATGCCA
 CCGATGTTGGGGCGCGGGTTCTGCCCCCTCTCCCGGATCAGAACCGAGCAGAG
 CCATGGAGGAAGATGAACAGTGCAAAAGAATGAGAATGGATGGTTGATGAGGAGAATA
 CATGAAAATGTGACAGCAAAAGAGAGAAGGCAAGTTGGGTTGTAGAGTTGGCTG
 CTGCTAATGAGTTGTTGATAGTGCCTATACTCTCAGAACATTGCGGCTGATGCC
 AGGCCAAGAGCCAGGAGGACCTCTGATAATGGTCCGGGATGATTGGTTGTTCTGTC
 AGGATGAACCCCTAGTGAGTGACACAGGGTGTGCTCCGACAACCTGAAATTGTA
 GATTAACAGCCCCATTGTAACCTGCTACCATCTTGTAGTGGCGGGTGTCTTCTCAG
 TTGCCACCCCTGCGTAAAGTGAATTCTCGGCCAAATAGATTGTTGTTGATAATAAT
 TTGCTTGGTTG

FIGURE 3

SEQ ID NO 2: *Oryza sativa* NHX1 protein

MGMEVAARLGALYTTSDYASVVSINLFVALLCACIVLGHLLLEENRWVNESITALIIGL
CTGVVILLMTKGKSSHLFVFSEDLFFIYLPPPIFNAGFQVKKKQFFRNFMТИLFGAV
GTMISFFTISIAIAIFSRMNIGLTDVGDFLAIVAIIFSATDSVCTLQVLNQDETFLYLS
LVFGEGVVDNATSVLFNALQNFDLVHIDAIVVAKFLGNFFYLFLSSTFLGVFAGLLSA
YI KKL YIGRHSTDREVALMLMAYLSYMLAEELLDLSGLTVPPCGIVMSHTWHNVTE
SSRVTTKHFATLFSIAETFLFLYVGMDALDIEKWEFASDRPGKSIGISSILLGLVILG
RAAFVFPLSFLSNTKKAPEKITYWRQQVVIWAGLMRGAWSIALAYNKFRSGHTQLH
GNAIMTSTTIVLFSTMVFGMMTKPLIRLLL PASGHPVTEPSSPKSLHSPLLTSMOG
SDLESTTNIVRPSLRLMLLTKPTHTVHYYWRKFDDALMRPMFGGRGFVPSPGSPTEQS
HGR

SEQ ID NO 3: *Arabidopsis thaliana* Nhxl

ATGTTGGATTCTCTAGTGTGCGAAAAGTGCCTTCGTTATCGACATCTGATCACGCTTCTGT
GGTTCGTTGAATCTCTTGTGCACTCTTGTGCTTGTATTGTTCTGGTCATCTTT
TGGAAAGAGAAATAGATGGATGAAAGCAATCCATACCGCCTGGTATTGGGCTAGGCACT
GGTGTACCATTTGGTATTAGTAAGGAAAAAGCTGCATCTCTCGTCTTAGTGA
AGATCTTTCTCATATATCTTGCACCCATTATATTCAATGCAGGGTTCAAGTAA
AAAAGAACGAGCTTTCGCAATTTCGTGACTATTATGCTTTGGTCTGTGGACT
ATTATTCTGCAACATCATATCTCTAGGTGAAACAGTCTTAAAGAACAGTGGACAT
TGGAACCTTGACTTGGTGATTATCTGCTATTGGGCCATTGGTCAACAGATT
CACTATGTAACACTGCAGGTTCTGAATCAAGACGAGACACCTTGCTTACAGTCTGTA
TCGGAGAGGGTGTGAAATGTCACAGTCTGGTCTTCAACGCGATTAGAG
CTTGTGATCTCACTCACCTAACCAACGAGCTGCTTCACTCTTGTGAAACTCTGT
ATTGGTTCTCTTAAAGTACCTTGTGCTTGTGCAACGGCTGTGATAACTGCGTATGT
ATCAAGAACGCTATACTTGGAAAGGCACTCAACTGACCGAGAGGTTGCCCTTATGATGT
TATGGCGTATCTTCTTATATGCTTGTGAGCTTGCAGTTGAGCGGTATCCTCACTG
TGTTTTCTGTGATTGTGATGTCCATTACACATGGCAATGTAAACGGAGAGCTCA
AGAATAACAAACAAAGCATACCTTGTGCAATTGTCTTGTGAACTTATTT
CTTGTATGTGCAATGGATGTCCTTGGACATTGACAAGTGGAGATCCGTGAGCACAC
CGGGAACATCGATCGCAGTGAACGCAACTCTAATGGGCTGGTCACTGGTGGAAAGAGCA
GCGTTCGTCTTCCGTTATCGTTCTATCTAACCTAGGCCAAGAAGAACATCAAAGCGAGAA
AATCAACTTAAACATGCGAGGTGATTGGTGTCTGGTCTCATGAGAGGTGCTGTAT
CTATGGCTCTGATACAACAGTTTACAAGGGCGGGCACACAGATGTACCGGGAAAT
GCAATCATGATCACGAGTACGATAACTGTCTGCTTTTACACAGTGGTGTGGTAT
GCTGACCAAAACACTCATAAAGCTACCTTACCGCACAGAACGCCACACGAGCATGT
TATCTGTGATGACAACACCCAAAATCCATACATCCCTTGTGGACCAAGACTCGTTC
ATTGAGCCTTCAGGGACACCAATGTGCTCGCCCTGACAGTATACTGCTTCTGAC
ACGGGCAACTCGAACCGTGCATTACTACTGGAGACAATTGTGACTCTTCTGAC
CGCTTGTGGAGGTGCTGCTTGTGACCTTGTGGACCTTGTGACAGAGAGAAAC
CCTCTGATCTAGTAAAGCT

FIGURE 3 (continued)

Replacement Sheet

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SEQ ID NO 4: *Arabidopsis thaliana* Nhxl protein

MLDSLVSKLPSSLSDHASVVALNLFVALLCACIVLGHLEENRWMNESITALLIGLT
GVTILLISKGKSSHLLVFSEDLFFIYLPPPIIFNAQFQVKKQFFRNFVITMLFGAVGT
IISCTIISLGVQTQFFKLDIGTFDLGDYLAIAGIAFAATDSVCTLQVLNQDETPLLYSLV
FGEVVVNDATSVVFNAIQSFDLTHLNHEAFAHLLGNFLSTLGAATGLISAYV
IKKLYFGRHSTDREVALMMLMAYLSYMLAEFDLGSILTVFFCIVMSHYTWHNVTESS
RITTKHTFATLSFLAETFLFLVYGMALDIDKWRSLSGVTSIAVSSILMGLVVMGRA
AFVFPLSFLSNLAKKNQSEKINFNMQVVIWWSGLMRGAVSMALAYNKTRAGHTDVRGN
AIMITSTITVCLFSTVFGMLTKPLISYLLPHQNATTMSLSDNTPKSIHPLLDQDSP
IEPSGNHNVPRPDSIRGFLTRPTRTVHYWRFDDSFMRPVFGGRGFVFPVPGSPERN
PPDLSKA

SEQ ID NO 5: *Medicago sativa* Na⁺/H⁺ antiporter

ACGGGGGAATCCAACCCATTGTATAACAAACAATACCGGAGATATATAATATCTCTCT
CCTCTAAATAGAATATCGACAGAGTGAATCAACAAAGATTATTAGGAGTGAATATCTTCC
ACGGCAGCTCAAAACAAACACATCCGATTCAATCATCACCGCTTGCTCGAGAGATACT
TGTGTGATGAGATCAGAAGGTTCTAAATGGACAGCTCAGAACATAATATCTGGG
ATTCATTATTACTACTGGACTTGAATTTGAAATTGAAATTCAAGCAATAATCTAATTGTT
TTAAATCTGCTTGTGAAATTGTGGAGGGTGGACGACATCATGGCTATTGAAATGTCTT
CTATTGTTCAAAACTCAATGTTATCCACTCGGATCATGCTTCTGTTCTATG
AACTGTTGTTGGAACACTCTGTGTGCTGTATTGCTTGGTCACTCTCGAGGAGAA
TCGATGGATGAATCCATCACTGCCCTTGTATTGGTATTGCACTGGTGTAGTGA
TTTGCTGTTAGTGTGGAAAAGTTCGCATATTCTGTTTCAGTGAAGATCTTTC
TTTATATACCTCTGCCGCCTATTATATTCAATGCCGGTTCAAGTAAGGAAAAGCA
GTTTTGTCAACTGACTATCACATCATGGAGCTATTGGCACATTAAATATCTT
GTGTCATTATAACACGGGTGCACTTTGCTTTAAAGGGATGGATACTGGCCACTG
GAAATCGGCATTATCTAGTATTGGAGCAATTGGCCACAGACTCTGTTGCAC
ATGCAAGGTGCTAATCAGGTGAGACACCTTATTGTATAGTCTGTATTGGGAAG
GTGTTGTAATGATGTCACCTCAGTGGTTCTTCAATGCAATTCAAAAGCTTGTACCT
AAACAATGCAACCTTCATGTCATTGTCATTCTGGCAACTTCTGTATTGTT
AGCAAGCACACTCTGGCTGTGACAGGTCTGCTCAGTGCCTATGTATTAAAAGC
TGTACATTGGCAGGCACTCCACAGATCGTGAGGTTGCTCTTGTATGCTAATGGCATA
CTCTCTTATGCTGGCTGAGTTAACCTACTGAGTGGCATCTTACCGTATTCTT
TGGTATTGTTATGTCATTATACTGGCAATATGTGACGGCAGAGTTCAAGAATCACTA
CCAACTTCTGGCTACCTTGTCTTGTGAGATCTTATCTCTTATGT
GGTATGGATGCCCTGGACATTGAAAATGGAAGTTGTTAGTGTAGTCTGGACATC
TATAGCTGCAAGTTCAGTATTGTTGGCTAATACTCTTGGAAAGAGCAGCAGCTT
TCCCTTATCTTCTTATCCAACTTGAATTAAACATCAGAAAGATTCCCTC
AGACAGCAAGTTATCATTGGGGCTGGCTTATGAGAGGTTGCTTCAATGGCACT
TGGCTATAATCAGTCACCATGGCTGGGCAATCTCAACTACAGTAGCAATCATGA
TAACCAAGCACCACACTGTTGCTTTTCAAGCACAGTGGTTGGTGTGACTAAG
CCACTCATAAGGCTCTACTACCTCATCTAAACATCAGCAGCATGACAACCACAGA
ATCGACTACTCAAATCATTCAATTGTCCTCAGTGGAGATTCCCGAGATTCTGAAG
CTGATCTGAAGGCCATGAAATTCAACCGACCGAACAGCCTCGTGTCTTACTATCAACT

FIGURE 3 (continued)

Replacement Sheet

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CCAACTCACACTGTCATCGATTAGGGCAAAGTTGATGATTCACTCATGCGTCTGT
TTTGGTGGCAGAGGTTGTTCTGTAGAACCTGGCTACCAACTGAACGCAATGGTA
ATCAATGGGGTGAAGAAAGAACCATGAAATGTGTAATATGTTGTTGATACACTACGTAT
GATTGTAAGAAAGTCATGCAACCGTGTGATAATGTATTATTGATAGAACCTAGTAG
TGAAATTTCTTAAAAAAACCTCGTAGGAAATTGTTGAGCTGTTGAGTAGC
TAGTATGAGATGGCTGCCATCTCTGTCTATTATGTAACAACTACAAATTGTTTAGAT
TCTCTGAGCCATTACATGTTGTTGATGTGTCACAAAAAA

SEQ ID NO 6: *Medicago sativa* Na+/H+ antiporter protein

MAIEMSSIVSKLSMLSTS DHASVVSMLNFVALLCACIVLGHILLEENRW MNEISITALLIG
ICTGVVILLFSGGKSSHILVFSEDLFFIYLLPPIFNAGFQVKKQFVNFMITISFGA
IGTLISCVI ITTGATFAFKRMDIGPLEIDYLAIGAIFAATDSVCTLQVLNQDETPLL
SLVFGEGVNVNDATSVVLFNAIQSFDLNQLNPSIALHFLGNFLYLFVASTLLGVVTGLLS
AYVIKKLYIGRHSTDREVALMLMAYLSMLAELTYSLSGILTVFFCGIVMSHYTWHNVT
QSSRITTKHSFATLSFVAEIFIFLYVGMDALDEKWKVSDSPGTSIAASSVLLGILL
GRAAFVFLSFLSLSNLTKS0HQKISFRQVIIWWAGLMRGA VSMALAYNQFTMSGHTQL
RSNAIMITSTITVVLFSTVVFGLLTKPLIRLLLPHPKITSMTTESTPKSFIVPILG
DSRDSEADLEGHEIHRPNSLRLALLSTPHTVHRLWRKFDDSFMRPVFGGRGFVPEPGS
PSERNGNQWG

SEQ ID NO 7: *Suaeda maritima* subsp. *salsa* Na+/H+ antiporter

TTTCACAAAGATTATTGGACTTCAGAAGTTGATTTGTGGAGCTAGAAAGGGTTTCAC
ATACATTGGACATTAATTACTTGTGAATATATATTGTGTTGTGGGTCTGGATTCCG
GTGCACAAAGAAATAGGTGAACAACTGTGTCACAGTTGAGCTCTTTTGCAAGTAAG
ATGGACATGGTTCGACGCTGATCATGCTTCGGTTGTTGATGAATTGTTGTGCC
ACTGTTACGTGGCTGCATTGTAATTGGTCATCTCTCGAAGAGAAATCGCTGGATGAATG
ATATCATTACAGTTGCTAATAGGTTATCTACTGGGATTATAATCTGCTAATTAGT
GGAGGAAGAGGTTCGCATTGTTGGCTTCACTGAGAAGAGATCTTATACCTCCT
TCCACCGATTATTCATGCGGGGTTTCAGGTGAAAAGAAGCAATTTCGCCAACT
TCATTACTATTGTTGGAGCCGGTTGGTACATTGGTATCATTCTAAATCATATT
CTTGGTCAATAGCTATATTCAAAGATGGATATTGGTCGCTGGAGTTAGGGATCT
TCTGCAATTGGTCAATATTGCTGCACATTGTCAGTTGCACATTGCAAGTGCTTA
ATCAAGATGAGACTCCACTTCTTATAGTCTCGTTGGTAAGGGTGCCTAATGAT
GCTACATCAGTGGTGTGTTCAATGCAATTCAAATTTGACCTCACCGCACATTGACCA
CAGAATTGCTCCAATTGGTGGCAACTTCTATATTATTTGCAAGCACTCGC
TTGGAGCAGTGACTGGCTGCTAAGCGCTATGTCATCAAAAGTTGACTTTGGAGG
CATTCACACTGACCGTGAGGTAGCCTTAATGATGCTTATGGCTTATCTACGTCATGCT
TGCTGAACCTCTTCTATGCGGAACTTACAGTATTCTCTGTGGGATTGTCATGT
CCCATTATACTGGCACAATGTGACGGAGAGCTCCAGAGTAACCCACCAAGCATGCTTT
GCAACACTCTTTGTAGCTGAGATCTTCTATGTTCTATGTTGATGGTCACT
GGATATTGAGAAGTGGAGATTGAGCTGAGCGATGCTCTGGAAACATCTGTTGCTGAGTT
CCATACTGCTGGTCTTACATGGTGGCGAGCTGCTTGTGTTTCCCTCGCCTT

FIGURE 3 (continued)

TTAATGAACCTGTCCAAGAAATCAAATAGT GAGAAGGT CACCTCAATCAGCAGA TAGT
 CATTGGTGGGCTGGTCTCATGAAAAGTGTCTCGTGGCCTTGCTTATAATCAGT
 TTTCAAGGT CAGGACACACACAGTGAGGGAAATGCAATCATGATTACAAGCACCATA
 ACCGGTTGCTTCTTCACTGAGTGGTATTGGGTTGCTGACAAAGCCTCTTATAACTCTT
 TATGTTGCCCTAACCGAAAATTTCACTAGT GCAAGCAGGTGTCAGATTGGGGAGTC
 CAAAGTCATCTCCTGCCCTCTTGAAAGATAGAACAGATTCTGAAGCTGATTTGGC
 AACGATGATGAGAAGAACCTACCCCCGTGGGACTATAGCTGACCTACTAGTCTTGAT
 CCTACTAAATGCCAACACTCACACTGTCCATCATTATTGGCGCAGATTGATGATTATT
 TCATGGCGCTGTATTGGGCGGGGGTTTGACTCTTTGTCGCCAGGTCAACCCACC
 GAACAGAGCATCACTAAATTGTCACAGAGAACATAAGGTTAGCATAATTGAGGCA GTT
 GGTGCAAGAAACTAATAACTAACAGGCTACAGGCAATCTACAAAGACAAAATGCCCT
 TACCCAAGAACGAAACAGCCCGTGTGGCTCGTGGCTGATGTTAAGACTGTGCTG
 TACTTCGTAAATAGAGAGTAAGTTACAGAAACCACCGATTAAACATATCTGTAATT
 TTACAGCATGGGATATTGATGTCATCTTAAATCTGCTGTAGCTAGAATACTCTAGCA
 TGTGTTGTAGTTTCAGTCTTACCCATTAGGTTTCTCTACATAACCTCAATAAGCTG
 TTAGTGTGCTTACTGCTTACTTTAGAGCAACTGCAACTGTGAAAATTGTTACGTCA
 CGGCACCTGTGTAATTATCATTATGATGGAGCATGATCATTGCAATCAAAT
 TTACAATACTGTGATTAAAAAA

SEQ ID NO 8: *Suaeda maritima* subsp. *salsa* Na^+/H^+ antiporter protein

MLSQSSFFASKMDMVSTS DHASVVSMLFVALLRG CIVIGHLLEENRWMNESITALLI
 GLSTGIIILLISGGKSSHLIVFSEDLFFIYLLPPIIFNAGFOVKKQFFRNFIITIILFG
 AVGTLVFSFIISLGSIAIFQKMDIGSLELGLLIAIGAIFAAATDSVCTLQVLNQDETPLL
 YSLVFGEVVNDATSVVLFNAIQNPDLTIDHRIAFQFGGNFLYLFPASTLLGAVTGLL
 SAYVIKKLYFGRHSTDREVALMMLMAYL SMLAELFYLSGLITVFFCGIVMSHYTWHINV
 TESSRVTTHAFATLSFVAEIFIFLYVGMDALDIEKWRFVSDSPGTSAVSSILLGLHM
 VGRAAFVFPFAFLMNLSKKSNEKVTFNQQIVIWWAGLMKSAVSVALAYNQFSRSRSHQTQ
 LRGNAIMITSITVVLFSTMVGFLLT KPLILFMLPQP KHTFSASTVSDLGSPKSFLPL
 LEDRQDSEADLGNDDEEAYPRGTIAPRTSLRMLLNAPHTVHHYWRRFDDYFMRPVFGG
 RGFPVPVGSPTEQSITNFVTE NIS

SEQ ID NO 9: *Zea mays* Na^+/H^+ antiporter NHX1

ATGGGGCTGGAGTAGTGGCGGAGCTAGTCCGCCCTGGCGCTCTTCCACCTCAGA
 TCACGCCCTCCGTGGTTAGCATCAATCTCTTGTCGCCCTGCTCTGCCCTGTATGCTCC
 TGGGCCATCTCTTGAAAGAGAATAGTGGGTGAAACGAGTCACCGCGCTGATTGTCGGG
 CTCGGCACCGTACCGTACCGTACATGATTAGCCGGGGGGTGGTTATTCACTGCTCTAGT
 CTCTCCGAGGACCTCTCTCTATCTTTGCCGCCATCATTCAATGAGGGT
 TCCAAGTGAAGAAGAAAACAGTTCTTCGAAACTCATTACTATTACACTGTTGGTCA
 GTTGCGACCTTGATCTCTTTACTGTAATATCCTTGCGCTCTAGGACTAATATCAAG
 GCTTAATATCGCGCCTTGAACTGGGAGACTATCTGCACTTGGGCAATATTCTCGG
 CCACAGACTCGGTTGACCTTGAGGTGTTAAGCCAAGATGAGACACCATTCTGTAC

FIGURE 3 (continued)

AGTCTTGTATCGGTGAAGGCGTGGTCAACGATGCCACTCCGTAGTGGTGTTCATGC
 ACTCCAAAATTGATATAACTCACATCGAGGGAGGTGTCTCCATCTATTAGGAA
 ACTTCTTCTACCTTCTCTATCAACTCTGTTGGGAGTGGCACAGGACTTATCTCA
 GCGTTAGTGTATTTAAAGCTATCTTGGCAGGCACTCTACTGACAGGGAGGTGGCTCT
 TATGATGCTTATGGCTATCTCTCTACATGTTGGCGGAACTCTTCGCGCTGAGCGGGA
 TCTTGACGGTATTCTTGGGTGATTGTATGAGCCACTATACATGGCACAACTGTGACA
 GAGTCCAGCAGAATCAGACTAACGATCGCTTGCACGCTCAGCTCTAGCCGAAAC
 CTTCCTTTCTGTACGGGTATGGATGCTCTCGACATTGACAAGTGGAGGTGGTGA
 GTGACACCCCGAGTACGCTCTGCCATAAGCTCGATTGTGATGGACTCGTGTGGTT
 GGCGGGGCTGCCCTCGTATCTCCCTCTCCCTCAATTAGCGAAAAAAACCGGA
 GCACGAAAATCAGCTGGAGCAGCAGGGTGTATGGTGGGGCTCATCGCAG
 GCGCCGTTCTGATGGCCCTAGCGTACAAGAAGTTACCCGCCAGGGCATACTCAGCTC
 CGCGGAAACCGCATGATTACAGCAGATTATCGCTGTGTTGTTGACAATGTT
 GTTCGGCTGTCAAGCAGCTTAATTAACTTGCTTAACCCACCGTAACGCCACAT
 CGATGTTGAGCGATGACTCAAGCCAAAGCTCTGCATAGCCCTCTGCTAACCTCTCA
 CTCGGTAGCGACTTAGAGGAGCGACCAACATCCCGGGCGAGCTCCATAAGGGCGA
 GTTCCTCACCATGACTAGGACCGTGCACCGATACTGGCGAACATTGCGACGCGCTTC
 TGAGGCCATGTTGGAGGCCGGTTCTGACCTTCTGCGCAGGCCAGGGCACCGAG
 CGTAATCGCCGGATCTTCCAAAGGCTTAA

SEQ ID NO 10: Zea mays Na⁺/H⁺ antiporter NHX1 protein

MGLGVVAELVRLGVLSSTDHASVVSINLFVALLCACIVLGHLLNEENRWVNESTALIVG
 LGTGTIVLMSIRGVVIIHVLVSEDLFFYLPPIIFPNAGQVKKQFFRNFITITLFGA
 VGTTLISFTVISLGALGLISRLRNIGALELGDYLALGAIFSAATDSVCTLQVLSQDDEPFLY
 SLVFGEGVVNDATSVVFNALQNFIDITHIDAEEVFHLLGNFFYLFLLSTVLGVATGLIS
 ALVIKKLYFGRHSTDREVALMMLMAYLSYMELAFLFALSGLITVFFGCVMSHYTWHVNT
 ESSRITTKHAFATLSFLAETFLFLYVGMDALDIDKWRVSVDTPGKSLAISSIILMGLVMV
 GRAAFVFPLSPLSNLAKKTEHEKISWKQQVVIWAGLMRGAWSMALAYKKFTRAGHTQV
 RGNNAIMTSTIIVVLFSTMVFLLTCKPLINLLIPHRNATSMSLSDDSPSKSLHSPLLTSQ
 LGSDLEEPPTNIPRPSSIRGEFLTMTRVHRYWRKFDDAFMRPMFGRGFVFPVGSPT
 RNPPDLSKA

SEQ ID NO 11: Zea mays Na⁺/H⁺ antiporter NHX2

ATGGGCCTTGGTGTGATCGGAGACGGTCAGGCTCGGAGTCCTTAGCTGACCTCGGA
 TCATGCCAGCGTGTCACTAACAACTCTCGTAGCACTTCTTGCCTGTATCGTC
 TCGGGCATCTCTGGAGGAACCGAATGGTTAATGAGTCATTACAGCACTGCTGGTG
 GGGCTGGGCACTGGGACCGTGATTCTGATGATTAGTCGGGGCGTGAAGTATTCACTTCT
 CGTCTTCTAGAGGACCTGTTCTTATCTGTTACCTCGGATTATCTCAATGCG
 GGTTCAGTAAAGAAAACGCAATTCTCCGAACCTTATAACGATTATGGTTGGT
 GCTATTGGGACTCTGATTTCTTGTATAATCTCTTGTGCTATGGGGTTGTTCAA
 GAAACTTGATGTGGTCCACTCGAGCTGGGACTATCTGCAATTGGTGTATTTCT
 CGGCAACAGATTCTGTTGCACCTTACAGGTGCTAACAGGATGAAACACCCCTACTC

FIGURE 3 (continued)

TACAGTCTCGTATTGGCGAGGGCGTTGTTAATGATGCTACCTCAATCGTTGTTCAA
 CGCGCTCCAAAACATCGACATCACCCACATCAATGCCGAGGTGTTACCTCACCTCG
 GCAACTCTTGTACCTCTTCTATTGAGCACCGTGTGGCGACCGGTCTCATC
 TCCGCGCTGGTCAATTAGAAGATCTACTTGGACGCCACTCGACTGATCGGAAGTGGC
 CTTAATGATGCTGATGGCATATCTAAGCTCATGCTGTGGCAGAGCTTTTGCCTGTC
 GAATCTCACTGTGTTTCCGCTGCATCGTCATGAGCATTATACGTCACAAACGTC
 ACGGAGTCTAGCCGAATTACTACGAAGCACGCCCTTGCACCCCTGTCCTTCGCTGA
 GACTTCTATTTCTACGTTGGGATGGATGGCTAGACATTGAGAAGTGGCGTCCG
 TTTCGGACACCCCGGCCAAATCGATAGCCATATCTCCATACTCATGGGGCTTGTCA
 CTTGGACGCCGGCTTCTGTTCTGGCTAAGTTCTGTCAAAATCTGCCAAGAAGAA
 TGAGCACGAAAAGATCTCTGGCAGCACAGTGTGATCTGTCAGGCTTGTGATGA
 GGGGTGCTGTCTATGGCCCTAGCTTATAACAAGTTACAGAGGCCACATCGGAG
 GTGAGAGGTAAAGAAATCATGTTACTAGCACATTACCGTGTGCTATTCTCACAGT
 GTGTTGGTCTCTGACTAAACACTGTCAGCTGCTCTTATGCCCAACGCCATCTGA
 CCATGCTCTCCGACAGCACCCCGAAGTCATTGACTCACCTTGTGACATCCCAG
 CTCGGAAGCTCCATCGAAGAGCCGACCGAGATACCGCCCTACAAATATCGTGGCGA
 ATTCAAACTATGACGAGAACGGTGCATAGGTACTGGAGAAAATTGATGACAAATTCA
 TCGCCCAAATGTTGGCGGAGGGCTCGTACCCCTGTCCTGGTTACCAACGGAG
 AGGAATCCCCACGATTTCGAAGCCCTAA

SEQ ID NO 12: Zea mays Na+/H⁺ antiporter NHX2 protein

MGLGVDAETVRLGVLSSTSDDHASVVSNNFVALLCACIVLGHLEENRMVNESITALLV
 GLGTGTVILMSIRGVSIHVLVFSEDLFFIYLPPPIFNAGFQVKKQFFRNFITIILFG
 AIGTLISFVIISLGMGLFKLDVDPELGDYLIAIFISATDSVCTLQVLNQDETPLL
 YSLVFGEGVVNDATSVVNPNALQNFDTIHINAEVVFHLLGNFLYFLSTVLGVATGLI
 SALVIKKIYFGRHSTDREVALMMLMAYLSQLMELFALSGLITVFFGICIVMSHYWHNV
 TESSERRITKHAFATLSFLAETFIVFLYVGMDALIEKWRVSDDTPGKSIAISSILMGLVM
 LGRRAVFVPLSFLSNLAKKNEHEKISWKQVVIWWSGLMRGBAVSMALAYNKFRAGHTE
 VRGNEMIIMITSTIVVLFSTVVGFLLTCKPLIRLLMPHRHITMLSDSTPKSLHSPLTSQ
 LGSSIEEPTQIPRPTNIRGEFTTMTRTVHRYWRKFDDKFMRFPMFGRGFVPGSPTE
 RNPHDLSKP

SEQ ID NO 13: Zea mays Na+/H⁺ antiporter NHX3

ATGTCAATAGGACTGACGCCAGACCGTGAACAAAGCTAGCCAGGCCAGCACCC
 CCAAGTCGTCCTAAATTCTGTTGTCATTGCGCTCTCTGTCATGCTGTGCTGGTGAAGGCC
 ACCTCTTGAGGAGAACAGATGGCTCAATGAACTCAATAACAGCCATTCTCGTGGCGCT
 GCGACTGGGACCGTCATCTGCTCATCTCGAAAGGAAATCGAGCCACATAACTTGTGTT
 CGATGAGGAATTGTTTCTATCTACTCGCCAACTTATTTCAATGCCGTTTC
 AAGTAAGAAAAGCAATTCTCCGCAACTTATAACGATTATTTGTTGGTGTATT
 GGACTCTGATTCTCTTGTAATAATCTCTTGTGCTATGGGGTTGTCAGAAACT
 TGATGTTGGTCCACTCGAGCTGGGGACTATCTGCAATGGTGTATTCTCGGCAA
 CAGATTCTGTTGCACCTTACAGGTGCTTAACCAAGGATGAAACACCCCTACTCTACAGT

FIGURE 3 (continued)

CTGGTATTGGTGGGGGGCGTGAAACGACGCTACAAGTGGTGTGCTGTTAATCGAGT
 GCAAAAGATCGACTTCGAACACCTAACCGTCTGGGCATAGCAGCTGGCTCATTACCGCC
 TCCCTATCTGCTCACCTAACCGTCTGGGCATAGCAGCTGGCTCATTACCGCC
 TTGGTCTGATGGCCTACTGTCCTCATGCTGCTGAGTTGTTCAAGTCAGTGGTATCA
 TTACTGTTTTCTCGGGCGTCTGTCATGCCATGTCATGCTGAGTTGTTCAAGTCAGTGGTATCA
 TCGTCCAGAATTACCTCTGCCATGTCATGCTGTCATGCTGAGTTGTTCAAGTCAGTGGTATCA
 TTTGTTCTGTACGGGGGACGGACGCGCTGACTTCACAAAGTGGAAAGACGCTCTCGT
 TATCCCTTGGAAAGTCCCTAGGGTATCACGGGTGCTCTGGGGTTGGTTAGTCGGT
 CGGGCGGATTCTGTTTCCCTCTGTTCTGAGCAACCTTAGTAAGAAACCCCTGG
 GAAAAAAATCACGATCAGCAGGGTGTAAATTGGTGGCAGGACTATGGGGCG
 CCGTCAGCATCGCTTGGCTAACAAATTACAGGGCCGGTACACACTCAGTCAGAAGA
 GGGAAACGCAATCATGACTAGCACCATCATCGTGGTGTCTACAGTCGGTTT
 CGGCCTCTCACCAAACCGTTAATCAACCTCTCATACCCATCGAACCTCCA
 TGGTGTGACGACTCAGCCTAAGTCTACACAGCCACTTTAACCTCCACATG
 ATAAGCTCAATCAGGAGGCCACGCAAATCCGCGCCGACAATAATACGGGGTGAGTT
 CATGACCATGACCGAACCGTGCATCGTATTGGCGCAAGTTGATGACAAGTCATGA
 GGCCTATGTCGGAGGAGGGGTTGTCCGTTGTCCAGGGTCGCTACCGAAAGA
 AGCTCACCGATCTATCCAAGGCATGA

SEQ ID NO 14: Zea mays Na+/H₊ antiporter NHX3 protein

MSIGLTAETVTNKLASAEHPQVVPNSVFIALLCLCLVIGHLLEENRWVINESITAILVGA
 ATGTIVLISKGSNSHILVFPDEBLFVLLPPIFNAGFQVKKQFFRNFITIILFGAI
 GLISLVIISLGAMGLPKLVDGPLEGDYLAIGAIFSATDSVCTLQVLNQDETPLLYS
 LVFGEGVNVNDATSVLFLNAVKQIDFEHLTGEVALQVFGNLYLFSTSTVLGIATGLITA
 FVLKLTLYFGRHSTTRELAIMVLMAYLSFMLAELFSLSGITVTFPCGVLMHSVTWHNVTE
 SSRITSRHFVAMLSFIAETFLFLYVGTDALDFTKWKTSSLSFGKSLGVSSVLLGLVVG
 RAAFVPLSFLSNSLSSKHPGEKITIRQQVVIWAGLMRGAVSIALAFNKFRAGHTQVR
 GNAIMITSTIVVLFSTVVFGLLTKPLINLLIPHRNATMSLSDDSSPKSLHSPLLTSQQL
 ISSIEEPTQIPRPTNIRGEFMTRTVHRYWRKFDDKFMRPMFGGRGFVFPVPGSPTER
 SSPDLSKA

SEQ ID NO 15: Zea mays Na+/H₊ antiporter NHX4

ATGGGGTATCAGGTCGTCGCCGCGCAGCTGAAGCTGGCTCTCAGCTGACCAAGCAAG
 CGTGGTTATCATCACGCTCTTCGTGGCCCTCTCTGCGCTGCAAGTGTGGCCATC
 TTCTGAAGAGAAATCGCTGCTAAACGAATCAATTACAGCATTGATAATGGGCTCGGA
 ACAGGGGGTTGTGATTCTATGATCACGGCGAGGTAAAGAACAGCCGCTGCTTGTGTTCTC
 GGAGGACCTCTTCATCTATCTATTGCGCCCATATTTCATGCAATCACACTATTGCGCTGTTGGC
 TGAAGAAGAAACAGTTCTCGGAATTTCATGCAATCACACTATTGCGCTGTTGGC
 ACAATGATATCCTCTTCACAATCTCTCGGCCAATAGCGACATTCAAGCAGAATGAG
 CATTGGGACGCTAGATGTCGGGATTTCGCTGATTGGAGCTATCTTCTGCAACAGG
 ATTCTGTGTCACGCTGCGAGGTCCTCATCAGGATGAGACGCCCTTCTGACAGTCG

FIGURE 3 (continued)

GTATTCGGGGAGGGCGTAGTGAACGATGCCACAAGTGTGTACTCTTCAACGCAGTTCA
 GAAGATCCAGTTCACCCACATAAATGATGGACAGCTCTCCAGCTGATCGTAACTTCA
 TTTACCTCTTCCACAGACTGCTCGGTATCGGACCCGCTTGTATCACAGCGTT
 GTCTCTGAAGAAGTTGTATTCTGGCAGGACTCCACTACCCGGAGCTTGTGATCATGAT
 CTTAATGGCCTACCTGTATCATACATGCTTGGCAGGAGTTGTGTTAGTCTGTCGGGCTCTCA
 CGGTCTTCTCTGTGGCGTGTATGTCTATGTCATATGGCATAATGTTACGGAGTCC
 AGCAGGACAAACAGCCGTACAGTGTGCGACGCTCTCGTGTATATCTGAGACTTCA
 ATTCTGTATGGGCATGGACGACTCGATTCGAGAAGTGGAAAGACCTCATATTAA
 GCTCTGGTGGGACCCCTGGAGTTAGTGGAGTACTCATGGGCTGGTATGCTAGGCAGA
 GCTGCTTTCTGTCTCTCTCTCCACCTCCGCAAGAACACCAAAGTGA
 GAAAATTCTTCTTCTAGGATGCGAGGTTGTGATTGGGGGGGCTAATGCGCCGGCG
 TTTCCATGGCCTTGGCGTTGAAACAATTCACTCGGAGCGGCCACACCCAGCTATGCC
 AATGCTATCATGATAACTCAACCACTTACCGTGGTGTGTTCTCATGGATGGTCTTGG
 CATGATTACAAGCCTGATCAGGCTGCTTGTGCTGCGTCTGGACATCCGAGAGAAT
 TATCGGAACCGTCTGCAACCAAGGACTTCCATAGTCTCTTCTTACCTCGCAACAGGGA
 TCTGACCTGGAGTCGAAACCAATATAGTCCGCTCTCTCACTTAGGGGGCTCTCAC
 TAAACCAACTCACAGGGCACTACTACTGGCGAAGTGTGATGACGCACTTAGAGAC
 CGGTGTCGGGGACGTGGTTCTGTGCCATTGTTCCGGCAGCCAAACCGAGCGAAAT
 CCACCCGATCTGTCCAAGCGCTGA

SEQ ID NO 16: *Zea mays* Na⁺/H⁺ antiporter NHX4 protein

MGYQVVAALKLASSADHASVVIITLFVALLCACIVLGHLLNEESITALIIGLG
 TGVVILLISRGKNSRLLVSFEDLFFIYLPLPIIFNAGFQVKKQFFRNFMITLFGAVG
 TMISFFTISLGAIAITFSRMSIGTLDVGDFLAIAGFQIATDSVCTLQVLHQDETPFLYSL
 VFGEGVVNDATSVVLFNAVQKIQFTHINAWTALQLIGNFLYLFSTSTLGLGIGTGLITAF
 VLKKLYFGRHSTTRELAIMLMAYLSSYMLAELFSLSGLLTVFFCGVLMSHVTWHNTVES
 SRTTSRHVFATLSFIFISETFIFLYVGMDALDFEKWKWTSSLSFGGTGVSGLVMLGVMLGR
 AAFVFPFLSFLSNLAKKHQSEKISFRMQMVIWAGLMRGAWSMALALNKFRSGHTQLHG
 NAIMITSTITVVLFSTMVFGMITKPLIRLLPASGHPRELSEPSSPKSFHSPLLTSQOG
 SDLESTTINVRPSSLRGLLTKPTHTVHYWRKFDDALMRPVFGGRGFVPPVPGSPERN
 PPDLASKA

SEQ ID NO 17: *Hordeum vulgare* HvNHX1

AACGGAAACCTCTCCAGATACCCGCCGCGCAGAAAAGAATAGAGGAGAACCTCGACCT
 CCCCAGCCGCCGCGCTGCGCATCTGCCCTCCCTCTCGCTCCCCACCC
 GGGTTTCCCGTGCCATTCTTCCCTCCACCCCGGCCCCGGCACGAAGCAGCGGG
 AGACGGGGCCAGGAGGAGGAGCTCGGCTGTTCTTCGTCCTCCCGTCGATTGTC
 CGGATTAGCGCCGCCGCCGTTCCCGAGGGCTCCGTCGGGGTTGATTGATCTGATTG
 AAAAACCCCGCGCTTCCCGAGGGCCGCCGCTCGTCGCCGGAGCTAGCTGTC
 GTTCGCCGGGCTCAAGGAAGAAGAGTAACGGCGGGATGGCTTCGAAGTGTGCG
 CGCAGTTGGCGCGCTGAGCGACCGCCTGGCACCTCGGACACGCCCTCGTGGCTC
 ATCAACCTCTCGTCGCGCTGCTCGCCTGCATGTCCTCGGCCACCTCTCGAGGA

FIGURE 3 (continued)

GAACCGCTGGCTAACGAGTCCATCACCGCCCTCATCATGGGCTGTGCACGGCGTGG
 TGATCCTGATGACCACCAAGGGGAAGAGCTGCACGTCTCGTCTTCAGCGAGGACCTC
 TTCTTCATAACCTCCCTCCCATCATTCACACGGGGTTTCAGGTGAAGAAGAA
 GCAGTTCTTCGGAAATTTCATGACAATCACATTATTCCGGCTGTGGGACGATGATT
 CATTCTTCAAAATCTCTTGTGCGCATTTGGATATTCAAGCAAGATGAACATGGGACA
 CTGGATGTATCAGATTTCTCGCAATTGAGGCCATTTCCGGACAGATTCTGCTG
 CACTTTACAGGTTCTCAATCAGGACGAGACGCCCTTCTGTACAGTCTAGTTTCGGGG
 AAGGTGTTGTAACGATGCACATCAGTCGTCTTCACCGCTCCAGAACCTTCGAT
 CCTAAACAAATCAGTGAATCTGTCATTCTGAAGTCTGGAAACTCTGCTACTTATT
 CGTGTCAAGCACCTTCTGGAGTTTCTGGATTGCTCAGTGCATACATAATCAAGA
 AGTTATACATAGGAAGGCATTACTGACCGTGAGGTTGCGCTTATGATGCTCATGGCC
 TACCTCTCATATATGCTAGCTGAGCTGCTTGATTGAGTGGCATCCTCACCGTGTCTT
 CTGTTGTTATGATGTCGCAATTACTGCAATGGCATATGAGAGAGCTCAAGAGTTA
 CAACAAAGCATGCTTGCACCTTGTCTTCATTGCTGAGACCTTCTCTTCTT
 GTTGGGATGGATGCACTGGATACTGAGAAGTGGAAATTGCTAGTGCACAGCCCTGGCAA
 ATCCATCGGAATAAGCTCAATTGCTAGGATTAGTTCTGGTTGAAAGAGCTGCTTTG
 TCTTCCCCTTCAATTCTTATCACAACCTGACAAAGACGGAGCTCGAAAAAAATAAGC
 TGGAGGAGCAAAATCGTAATATGGTGGCTGGCTGTAGAGAGAGCTGTGTCGATCGC
 TCTGCTTCAAAATGTTCAAAAGATCTGGCCACACACAGCTACACGGCAACCGCATAA
 TGATCACCAGCACCATCACTGCTGTTCTGGTACATGCTGTTGGCATATTGACA
 AAGCCTCTGATCCGGTCTCTGCCCCGCGTGCAGACATGGCACCCTCGGAGCCCTC
 GTCACCGAAGTCCCTGCACCTCTCTCTCACAAGCATGCTAGGCTGGACATGGAGG
 CGCCTCTCCCCTACGTCAGGCCCTCCAGGCTCCGGATGCTCATCACCAAGCGACCCAC
 ACCATCCACTACTGGCGCAAGGTTGCGACGACGGCTGTGCGTCTATGGTGGCG
 GCGCGGGTTCTGGCCCTACTCCCCGGATCACCACCGTACCAAACGTAATCGTGGCAT
 GAACGTTGTGGAGAGAAGAGAAAAGCCATTACAGCTCAGGAGACACTCTGAACCTG
 TAACTGGAAGAGAAGGGAGTCTCACGCTCGGAAGAAGGCGAAGTCTCATTACTATT
 ATAGTGTGGCTGACTCGAGGGCGGAAGAAGGCGCCCTCTGACGATGGTTCAAGATG
 AACGGTTGGTGCAGGCCAACAGGAAGATGAACCCCTAGTTAACGGTGTGAGTACCA
 TCGCCTTATCGGTTACGACAAGGCTGTACATTGTTGATGAGATTAAACAGGCAATG
 TACCCCTATGAGATGAGATCTCTCTGGCAGGCGAGGAGCCATTCTGCTCTTGGC
 TAGGAGTCTGGCCTCTGCATATCTACAGTCTTATTAAATCTCTCCCCACTTTC
 TAGTGGGATTGGTGTCAATGGTGTGACTTACCAAGTGTGAGATGAGTGTGATGATCTT
 GTGGCCTGGTGTCAAAAGAACTCATCTCAAAGTTATCTATCTATTGAA
 TTGAACCTGAACTTGTGCTTGAACCCAC

SEQ ID NO 18: *Hordeum vulgare* HvNHX1 protein

MAFEVVAAQLARLSDLATSDHASVVSINLFVALLCACIVLGHLEENRWLNESITALI
 IGLCTGVVILMTKKGKSSHVLFSEDLFFIYLLPPIIFNAGFQVKKQFFRNFMFTILF
 GAVGTMISPFTISLAAIAIFSKMNIITLDVSDFLAIGAIIFSATDSVCTLQVLNQDETFF
 LYSLVFGEGVVNDATSVVLFNALQNFDPNQIDAIVILKFLGNFCYLFVSSTFLGVFSGL
 LSAYI IKKLYI GRHSTDREVALMMLMAYLSYMLAEELLDLSGILTUVFFCIVMSHYTWHN

FIGURE 3 (continued)

VTTESSRVTTKHAFATLSFIAETFLFLYVGMDALDIEWKWFASDSPGKSIGISSILLGLV
 LVGRAAFVPLSFLSNLTKEKISWRQQIVIWWAGLRAVSIALAYNKFRSGHT
 QLHGNNAIMITSTITVVLFSTMLFGILTAKPLIRFLLPASSNGDPSEPPSPKSPLTS
 MLGSDMEAPLPIVRPSSLRMLITKPTHTIHYYWRKFDDALMRPMFGGRGFVPPSPGSPT
 DPNVIVA

SEQ ID NO 19: *Triticum aestivum* NHX2

ATGGGGTACCAAGTGGTGGCGCGCAGCTGGCGGGCTGAGCGCGCGTGGGCACCTC
 GGACACGCCTCCGTGGTCCATCACCCCTTCGCGCTGCTCGCCCTGCATCG
 TCTCTGGCCACCTGCTCGAGGAGAACCGCTGCTCAACGAGTCCATCACCGCCCTCATC
 ATCGGGCTGTGACCGCGTGGTATCCTGATGACCAACCAAGGGAGAGCTCGCACGT
 GCTCGTCTCAGCGAGGACCTCTCTCATCTACCTCTGCCTCCATCATCTCAACG
 CGCGTTCCAGTGAAGAAGAACGAGTCTCCGGAAATTCTATGCCAATCACACTATT
 GGTGGCGTGGGAGCATGATGTCGTTTCAACATATCTTGTGCTGCCATTGGCATATT
 CAGCAGGATGAACATTGGACACTGGATGATCATGAGATTCTTGAATTGGAGTATCT
 TTCCCGCAGACAGATTCTGTCTGCACTCTACAGGTTCTCAATCAGGACGAGACCCCTT
 TTGTCAGTCTAGTGTGGGAAGGTGTGTGAACGATGCCACATCGTGTGCTTTT
 CAACCGCCTCCAGAACCTTCGATCTCAACCGATCGACCGATCGTCTTCATTAAAGTCT
 TGGGGAACCTCTCGTACTTATTCTGTGTCAGACCCATTCTGGAGTGTGTTACTGGATTG
 CTAGTCATACGTCATCAAGAAGTTATACATAGGAAGGCATTCTACTGACCGTGGAGGT
 CGCACTTGTGATGTCATGGCTACCTCTCATATATGCTAGCTGAGCTGCTAGATTGA
 GTGGTATCCTACTGTATTCTGTGGTATGTGATGTCACATTACACCTGGCACAAAC
 GTGACAGAGAGCTCAAGAGTACAACAAAGCATGCACTTGCACCTTGTCTTCATCG
 TGAGACTTTCTCTCTTTATGTGGGATGGATGCACTGGATATTGAGAAGTGGAAAT
 TTGCTAGTGACAGCCCGGCAATCCATTGGAATAAGCTCAATTGCTCGGGTTGGTT
 CTGGTTGGAAAGAGCTGCTTCTGCTTCCCGCTCGTTCTATCCAACCTGACAAAGAA
 GACCGAGCTGAAAAATAAGCTGGAGGCAGCAATCGTAATATGGTGGCTGGGCTGA
 TGAGAGGAGCTGTGTCATGCTCTGTCTTACAATAAGTTACAAGATCTGGTACACCA
 CAGCTGCA CGCCAGCAGCAGTATGATCACCGCAGCATCTACTGTCGTTCTGTTAGCAC
 TATGTTGTTGGCATTTGACAAAGCTCTGATCCGGTCCACTGCCCCGGCTGAGCA
 ATGGCGCCGCTCAGATCCCGCTCACCGAAGTCCCTGCACTCTCTCTCTCACAAGC
 CAGCTAGGCTCCGACCTGGAGGCAGCCTCTCCCATCGTAGGCCCTCCAGCCTCCGGAT
 GCTCATCACCAAGCGACCCACACCCATCCACTACTGCGCAAGTTGACGACGCC
 TGATGCGCCCGATGTTGGAGGGCGCGGGTCTGTGCTCTACTCCCCAGGATCACCCACC
 GATCCGAAGCTACTGTTGAAGTAAACGCTGCCAGAAGCAACGGAGAAGGCATTACAGC
 TTCAGGAGACACTCTGAACTGTAACAGGAAGGGAGGAAGTGTACAGCTTCAAGAAGA
 CGCGAAGTCTCCGGTAATAATTATAGCTTGGCAGACTCGGAAGGCTGAAGAAGGCC
 CCTCCGATGATGGTCAAGTGAACCGTTGGTTGGCAGCCACGGAGATGAACCCCTA
 GTAACGGTGTGCGAGTATCATCATCGCTTATCGTTACGACAAAGCTGTACAGTT
 TGTATGTTAGATTAACAAGCCAATTGTATCTTATGAGATCTCGTTGGCAGGAGCGCT
 TGACCTCTGTCATCTGCGACGACCGCGCGTGGCAAGGCGGGTGCAGGGGGTGTAC
 GCGCGTCTCCGCCGGTGCATGTTCCACAGCGAGGGGGCTCAAGAGCTTCGAGCA
 CCCATGAACCGCTTAAGCGCTCCCCAGGGTGGACAGCGAGGGCGTATGTGCGCCG

FIGURE 3 (continued)

CCAACTTCAAGGTGACGCCCTTACCAAGATCAACTCCATGCCCGCGTCGGCGACGCC
 ACCAACTGGCCGCCCTGGGACGACGCCCATCTGATCCTGCCGGCGCGCGTT
 GCTCTCGCTGCTGGCTCTGGCTTATTGATTTACTTGTTTTCTTCC
 TTGGCAATGTACATTCTGATCTGATCTGAGCGTGTGTGGCGTGGCGCGCTG
 GCACGTACGGCTTGTACATGGAGGAATAAGACTTTGCTTCCAGTCCAAAAA
 AAA

SEQ ID NO 20: *Triticum aestivum* NHX2 protein

MGYQVVAALRSLGALGTSRDHASVVSITLFVALLCACIVLGHLEENRWLNESITALI
 IGLCTGVVILMTTKGKSSHVLVFSEDLFFIYLLPPIFNAGFQVKKQFFRNFMATLFF
 GAVGTMMSFTISLAAIAIFSRMNIGTLVDSDFLAIGAIFSATDSVCTLQVLNQDETLPF
 LYSLFVGEGVNDATSVVLFNALQNFDPNQIDAIVILKFLGNFCYLFVFSSTFLGVFTGL
 LSAYVKKLYIAGRHDREVALVMLMAYLSYMLAELLDLSGILTVFFCGIVMSHYTWHN
 VTESSRVTTHAFATLSFIABFLFLYVGMDALDIEKWKFASDSPGKSIGISSILLGLV
 LVGRRAFPVPPLSFLSNLTKTELEKISWRQIVIWIWAGLMRGAWSIALAYNKFRSGHT
 QLHGNAIMITSTTIVVLFSTMLFGILTKPLIRFLLPASSNGAASDPASKSLHSPLLTS
 QLGSDLEAPLPIVRPSSLRMLITKPTHTIHYWRKFDDALMRPMFGRGFVPPYSPGSPT
 DPNVLVE

SEQ ID NO 21: *Oryza sativa* NHX2

GGTGGCCATCTCGCTTGAATCTGCAGGGTGAGCTGAGGAGGATCCACTGAGGTGGCGGC
 GGTGGAGATGGGCTGGATTTGGAGCTCTCGTCTCAATCCGGCGGGCTGTTGGGT
 CGGACTACGACTCGATCGTCGCGATCAACATCTCTGTCGCGCTGCTGTCAGCTGCATT
 GTGATCGGGCACACTGCTGGAGGGAAACGGTGGGTCAATGAATCCATCACCGCGCTTGT
 CATGGGGCTGATCACTGGAGGTGTGATTCTGCTGTCAGTGGTGGGAGAACTCCACACA
 TTCTGTGTTCACTGAGGACCTCTTCTCATTTATGCTTCCACCGATCATCTTAAAT
 GCTGGGTTCAAGTAAAGAAAAAACATTCTCGCAATTATGACAATTATTTATT
 TGGTGTGTTGGGACATTGATATCTCTTGTGATACTCTCTAGGTGCCATGACATTGT
 TCAAAAACCTGATGTTGCTTCACTCCAGCTGGGGACTATCTTGCAATTGGGCTATC
 TTCTCAGCAACAGATTCTGTTGACACCTTACAGGTGCTAACCAAGACGAAACCCCT
 ACTCTATAGTCGGTTTGGTAAGGGGGTGTCAATGATGCTACATCTGTTGCTCT
 TTATGCAATTGAAGACATTGATATTGCAATTGATGACCTTGTCTACTAGCGTTC
 ATAGGAAATTCTCTACCTATTCTCACCAGTACCCCTTGGAGTAGTTGCTGGGTT
 GCTTAGTGCCTATTATTAAAGAAAATGTTGCCAGACACTCAACTGACAGAGAAG
 TTGCTATCATGATACTCATGGCTACCTTCTATATGCTGTCATGCTGAGATCTG
 AGTGGCATTCTCACTGTGTTCTCTGGAAATAGTAATGTCACATTACACTGGCATAA
 TGTGACAGAAAAGCTCTAGGATTACTACCAAGCACACTTGTCTACTTATCTTCATTG
 CTGAAATTCTTCTATTCTCTATGTTGGGGATGGATGCACTGGACATTGAAAATGGAAA
 TTAGCTAGCAGCAGTCTAAAACCAATTGCTTAAAGTCAACTATATTGGCTTGGT
 TATGGTTGGAAGAGCAGCATTGATTCCTTGTCTTCTATCCAACTCAAGTAAA
 AAGAGACACGCCAAGATCTCCTCAAGCAGCAAGTAATCATATGGGGCAGGTCTC
 ATGAGAGGAGCAGTCAATAGCACTTGCCATCACAGTCACCGCATCTGGTCATAC

FIGURE 3 (continued)

TGAATTGCGAATCAATGCTATCATGATCACCAAGCACAGTCATTGTTGTTCTGTTCAGCA
CAATGGTTTTGGTTTTTACCAAGCCCTCCCTCAATCTCCCTCATCCCCACCAAGGCC
GACATAGCAGCTGATCTCTCAAGCCAGTCATCATGACCCACTCTTCTGGAAAGCCCTGCT
GGGGTCTGACTTCGATGTAGGCCAGGCCCTCCCTCAGAACAAACCTTCAGCTTCTCTCA
CCATTCACTCGCTCCGTTATCGCGTGCGCAAGTTGATGATGATGAGATTCTGCGC
CCGATGTTGGGGGGCCGAGGCTTCGTTCTCGCTGCGTGGCCAGTGGAGCGGAG
CATCCATGGATCTCAACTGGGACTGTGACTGAGGCTGAACATAGCTGAGTTGAGGT
CAGAAGGTGCAAGCA

SEQ ID NO 22: *Oryza sativa* NHX2 protein

MGLDLGALVLKSGGLLVSYDSDIVAINIFVALLCSCIVIGHLEGNRWVNESITALVMG
LITGGVILLVSGGNNSHILVFSEDLFFIYLLPPIIFNAGFOVKKQFFRNFMIIILFGA
VGTLISFVIISLGAMTFLFKKLDVGPLQLGDYLAIAGAIFSATDSVCTLQLVNLQDDEPLLY
SLVFGEGVVNDATSVVLFNNAIEDIDIANFDSDLVLLAFIGNFPLYLFFTSTLLGVVAGL
SAYIIKKLCFARHSTDREVAIMILMAYLSYMLSSMLLSDSILTVFFSIVMSHYTHWNVT
ESSRITTKHTFATLFSIAETFLFLYVGMDALIEKWKLASSPKKPIALSATILGLVMV
GRAAFVFPFLSFLSNLSKKEKTRPKISPKQVIIWWAGLMEGAWSIALAYHFKTASGHTEL
RINAIMITSTVIVVLFSTMVFGFFTAKPLNLLIPPRPDIAADLSSQSIIDPLLGSLLGS
DFDVQOPSPQNNQLQLLTIQTRS VHRVWRKFDDRFMRPMFPGGRGFVFPVGPSPVERSIH
GSQLGTVTEAEHS

SEQ ID NO 23: *Saccharomyces cerevisiae*

ATGCTATCCAAGGTATTGCTGAATATAGCTTCAAGGGTCTGTTAACCAACGCCAAGAG
AGCACTGATCTGACGATGATGATGAACTTCTACCTTCCCGATCTCCGGTAGCG
ATGACCTATTGAGGTATCTGATGATGATGAGCTTAAACCTGTTACAGAAGAAATGTC
TCTTCATGGGATTGTCATTATGTTGCTCTATTGATCTCTGATTGTTGCTAGTTA
CTATTTAACTCAGAAACGAAATTAGGGCAGTGCATGAAACTGTGCTTCTATTTTATG
GTATGGTATTGGCTGATAATAAGGATGTCCCGGGCATTATAATTCAAGAATACGGTT
ACTTTAAATTCTCTATTTTAATGTTCTATTGCGCCAATTATTAAATAGTGG
GTACGAGTTGAATCAAGTGAACTTCAATAATATGTTATCTATCTTAAATTGCGCA
TACCGGGCACCTCATATCTGCTGTTATTGAAATCATATTGATATCTGGACCTT
TTAGGACTAGAGAGATTGACATTCTATTGCGAGATGCAATGTCATGTTGGTGTACATT
ATCTGTCACCGACCCCTGTTACAATTCTTCAATTGCGTATAAAAGTGGATCCTA
AGCTATATACCATATTGGAGAATACTGTTAAATGATGCCATCTCTATTGTTATG
TTGAAACCTGTCAAAATTCTGGTCAATTGCGCAATTCTGCGTTTGTGAAGG
GGCAGGGCCTTTTGTGACTTCTCCGTTCTGTTGATAGGCCTCTTATAGGAA
TTCTTGTGCTCTCTGTTGAAACACACTCACATAAGGCCTATCTCAAATTGAGAGT
TGTTGATCTGTTGATGTTGATGCTTATGCAATTCTTCTCCAAACGGTGCATATGTC
CGGTATGTCCTCTGTTGATGTTGCGGAATTACTTAAACATTACGCCATTATAACA
TGTCAAGAAGATCACAGATCACCATTAAGTATTTCAACTATTGCGAAGATTACA
GAGAATTTCATCTTATCTAGGTTAGAACTTTTACTGAAGTAGAAGACTAGTCTA
TAAGCCACTGCTAATTATTGTCAGCTATTCTATATGTTGCTCGTTGGTGTGCTG

FIGURE 3 (continued)

TGTTCCATTGTCGAATTGTTAAGTGGATATAGAGTAAAGACAATCAGATCTATG
 AGCGGCATAACCGGAGAAAATTTCTCTTCCGATGAAATACCCCTACAAATTACCAAT
 GATGACATTGGCAGGTTTACGTGGTGTGGTGTGGCTGCCTGGCTGGGAAATTC
 AAGGTGAGTATAAGTCTACTTATTGGCAACGGTCTTGTGTTGTTAACAGTT
 ATCATTGGGGCACTACTGCAGGAATGTTAGAAGTTAAATATTAAAGACTGGTTG
 CATAAGTGAAGAAGATACATCTGATGACAGGTTGATATAGAGGCTCAAGGGCATAA
 ATTATTGAACGCTAGITCTATTGACAGACAGATTGGCCATATTCTGACAACAAATTCT
 CCAGATATTCAATTGACCAATTGCGCTCAGCAGTAACAAAGAACTCTCCAAATAACAT
 ATCCACAACCTGGTGTAACTTTGGAGGCTTAATGAAACTGAGAATACTGGCTA
 ACCCGGCAAGGTCTCTATGGATAAGCGTAATTGAGAGATAAACTGGAAACAATCTT
 AATTCCGACTCACAATGGTTCAAAATTGATGAAACAGGTATTGAAGCCAGTATTCTT
 GGACAACGTTCTCATCTTACAAGATTGGCTACGCAATCACCTGCAGATTCTT
 CCCAAACCACTAG

SEQ ID NO 24: *Saccharomyces cerevisiae* protein

MLSKVLLNIAFKVLLTTAKRAVDPDDDELLSPDLPGSDDPIAGDPDVLDNPVTEEMF
 SSWALFIMLLLISALWSSYLTQKRIRAVHETVLSIFYGMVIGLIIRMSPGHYIQDTV
 TFNSSYFFNVLLPPIILNSGYELNQVNFFNNMLSILIFAIPGTFISAVVIGIILYIWTF
 LGLESIDISFADAMSVGATLSATDPVTLISIFNAYKVDPKLYTIIFGESLLNDAISLVM
 FETCQKFHGPQATFSSVFEAGFLMTFSVNSLIVLIGVLIGVLLKTHIRYPQIES
 CLILLIAYESYFSNGCHMSGIVSLLFCGITALKHYANNMSRSQITIKYIFQLLARLS
 ENFIFIYLGLELFTEVELVYKPLIIVAASICVARWCASFPLSQFVNWIYRVKTIIRSM
 SGITGENISVPDEIPNYQMFTFWAGLRGAVGVALALGIQGEYKFTLLATLVVVVLT
 IIFGGTTAGMLEVNLNITKGCTCISEEEDTSDEFDEIAPRANLLNGSSIQDLDGPYSDNNS
 PDISIDQFAVSSNKNLPPNNTGGNTFGGLNETSPNPARSSMDKRNLRDKLGTIF
 NSDQSQWFQNFDQEVLPVFLDNVSPSLQDSATQSPADFSSQNH

SEQ ID NO 25: *Magnaporthe grisea*

ATGACTTCGATATCGCCGCAACCTCTGGAGCTCACAGCGCGCTGCCGAGGAACC
 CGAACCTGGAGGAATGGCAGTTGGCCTTGCAGTGTGTTGCCGTGATGGACTCC
 AGGACCTCGTCAGCTCGATTACCAATCTTCTCAACCTCCTCTCCACCCATCATC
 CTCTCGCCGCTACGAGTACATCAGGCCAACTCTTCCGGCACATCGGAACAATTCT
 CACGTCGATTGCGCTACGTTCTGCTGAGTACATCGGTGTTACTACTATGGC
 TTACACTCGCCGCTACCCCTCGAGGGGCTCACCATGAACTGGATCGATCCATATCTGTT
 GCGCAACTTGTCACTACGATCTGCACCATCATAGCCATCTTCAACTCGTACAA
 GGTGGACCGAAGCTGTATACCATCATCTTGGAGAGGGCATCTCAATGACGCTGTGG
 CCATTGTCACTTCGAGTCGGCGAAAAGTCCGCCAGGGCTTGACCAAGGCAGCGCT
 GCTGGCATCTCACCTCTGGGGTTCTGGATTCTTGTGAGGGACTCTTCGGCAG
 CTGGTTCATCGGGCGCTCTGGCATCTCCACGGCGCTCATGCTCAAGTACACGTTAC
 TCAGGAGGTTCCCAAGCTGGAGAGCTGTTGATTGTGCTTATTGCTTACGCCACGCTAC
 TACTTTCCAGGCCATACACATGTCTGAAATTGTCAGTGTGTTCTGCGGAATCAC
 ACTCAAACACTATGCACTTCACATGTGCGAAGAACTCAGCTACGCTACGCAAGTACA

FIGURE 3 (continued)

TGTTCCAGGTCCCGACAACGTCTGAGAACCTTTATTTACGGGTGTTCC
 CTCTTACGGACAAGGATCTCCAGTCCAGCCCCCTCTCATCATTGTCAGTGTCACTGGC
 GGTGTGCGCAGCTCGCTGGGTGCGTATCCCCACTCTCGTGGGCATCAACTGGTTCC
 ACAAGTACCGGGCAGAAAGACGTGGCATCAAGAACGTGCCGAGGAGCTGGTACAAG
 TACCAAGGCATGCTGTTCTGGCAGGGTTCGTGAGCCTGGTGTGCCCTGGCCGC
 GTTGTGACGCCAAGGACCACCGTCATTCAAGGCAGGGTCTGGTGTGGTGC
 TCACTGTTCATCATATTGGTGCACACTACGGTCAACTGGTCTGAATCTCGAGATCCG
 ACGGGAGTACGGATGAGATCGATTCTGACGATGAATTGACATCGAGGAGTGGGG
 CTACTACAAGGATCGGGTAAAGGAATAGTTATAGCCGGCCGGGCCAATGGTGTG
 TGCCCCCTGGACACAGTCAGGTCGGAGCTGAGACAGTAAATGGCCGGCTGGGAAGA
 GACGCGAGCGGCTGGAGCTCAGGACATAGATCTCCCTGAGTGCAGGAAAGGCTGGCAG
 TCTCGTCCGTAACAGGTCACACCGGAAGAGCGGAAAGACTGGACACTCTGGCAACC
 CGGGCGGCTGACAGACTCGGATGACTTTGGGAGGGACATTGACACGTGCGACCTGGCG
 CCACCAAGCCCCCTAGGAGACGATCCAGCCTAACGGGCGACGAAGAGGGCAGC
 TGGTTTGCCAGCGGGGGGGAGCAGGACAAGGTCAACACAGAGACGGGTGCTTGTCCG
 CCACGGCCGCGATGCCCGACCTGTTAGCAGCACCGAGGACCAACAGCCCTGTTCAAGGAG
 CTGGACGAGGACTACATAACCGAAGACTGTCTGATGGCGGTGCCGGCGTGGAA
 CGGTGGTGGCGCTGGCGATCGAGTTAG

SEQ ID NO 26: *Magnaporthe grisea* protein

MTFDIAGNLLTRRAAEEPEPGGMAGVGLALRVFAVDGLQDLVSFDYQIFPNLLPPII
 LSSGYELHQANFFRHIGTILTFAFAGTFLSAVVIGVILWLYTRVPLEGLTMNWIDAISV
 GATLSATDPVTIIAIFNSYKVDPKLYTIIFGEIAILNDAVAIVIFESAQKSARGLTKGSA
 AGISTFFWGWFIFLRLDFGSGSLFIGALLGILMLKTYLRRFPKLESCLIVLIAYATY
 YFSQAIHMSGIVSLLFCGTCITLKHAYFNMSRRTQLTTKYMFPVLAQLENPFIYLVGS
 LFTDKDLQFQPLLIIVTVMAVCAARWAVFPLSWAINWFHKYRAERRGIKNVPEELPYK
 YQGMLFWAGLRAVGVALAALLTAKDHRAFKATVLUVVVLTVIIFGGTTVNVLEILEIR
 TGVTDIDEIDSDEFDIEAVGGYYKRSGNGIGYSPAGRNGVPLDTRPGRRRDSNGAVGGR
 DASGWSSGHRPLSAARPGSLVRTGSTREEAERLDLLGNPGGSTDSDFGSDIDTSDLP
 PPAPRRRSSPMPPTGDEEAAGLPAAGSRTRSNTETGGLSATAAIRQLFSTEDPTALFRQ
 LDEDYIKPKLILLGGAGRCNGGGAGSS

SEQ ID NO 27: Prolamine promoter

CTTCTACATCGGCTTAGGTAGCAACACGACTTTATTATTTATTTATTTATT
 ATTATTTACAAAAATATAAAATAGATCAGTCCTCACACAAAGTAGAGCAAGTTGGTG
 AGTTATTGAAAGTCTACAAAGCTAATTAAAGTTATGTCATTAACCTTTATCATAT
 TACAAACAAAGAGTGTCAATGGAACAATGAAACCATATGACACATAACTATAATTGGTTT
 TATTATGAAATATATAATCAAGAGAAATAATCCACATAGCCGTAAGGTTCTACAT
 GTGGTGCATTACAAAATATATAGCTTACAAAATGACAAGCTTAGTTGAAAAT
 TGAATCCTTACATGACACATAAGTGAAGTGTAGTGAATGATGATGATGATATCAAAGAC
 ATTTTAGGTGCACCTAACAGAATATCCAAATAATGACTCACTTAGATCATAATAGA

FIGURE 3 (continued)

GCATCAAGTAAAACATACTCTAAAGCAACCGATGGGAAAGCATCTATAATAGACAA
GCACAATGAAAATCCTCATCATCCTCACCAATTCAAATATTAGTTGAAGCATAG
TAGTA

SEQ ID NO 28: Ubiquitin promoter without first intron

GATAATGAGCATTGCATGCTAAGTTAAAAAAATTACACATATTTTTGTCAAC
TTGTTGAAGTGAGTTATCTATCTTATACATATATTAACTTACTCTACGAAT
ATATAATCTATAGTACTACAATAATATCAGTGTAGAGAACTATATAATGAACAGT
TAGACATGGCTAAAGGACAATTGAGTATTTGACAACAGGACTCTACAGTTATCTT
TTTACTGTGATGTGCTCCTTTTTGCAATAGCTTACCTATATAATACTCTA
TCCATTATTAGTACATCATTAGGGTTAGGGTTAATGGTTTATAGACTAATT
TTTACTACATCTATTATCTATTAGCCTCTAAATTAAAGAAAACAAACTCTAT
TTTAGTTTTTATTTAATAATTAGATAAAATAGAATAAAATAAGTACTAAAAA
TTAAACAAATAACCCCTTAAGAAATTAAAAAAACTAAAGGAAACATTTCCTGTTGAG
TAGATAATGCAGCCTGTTAACGCCGTCAGCAGTCTAACGGACACCAACAGGAAC
CAGCAGCGTCGCGTGGGCCAAGCGAACAGCAGCGCACGGCATCTGTCGCTGCC
GGACCCCTCTCGAGAGTCCGCTCCACGGTTGGACTTGCCTCGCTGTCG
ATTGCGTGGCGGAGCGGCAGACGTGAGCGGCACGGCAGGGGGCCTCCCTCTCA
CGGCAGCGCAGCTACGGGATTCCCTTCCACCCCTCTTCGCTTCCCTCGCC
CGCCGTAATAAAATAGACACCCCCCACACCCCTCTGGTGTGTTGAG
GCGCACACACACAAACAGATCTCCCCAAATCCACCGTCGGCACCTCCGCTTC

SEQ ID NO 29: prm3122 (sense, AttB1 site in italic)

GGGGACAAGTTGTACAAAAAAGCAGGCTTCACAATGGGGATGGAGGTGG

SEQ ID NO 30: prm3123 (reverse, complementary, AttB2 site in italic)

GGGGACCACTTGTACAAGAAAGCTGGGTGCACTGTTCATCTCCTCC

FIGURE 3 (continued)